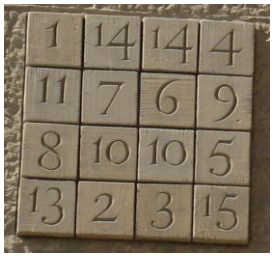
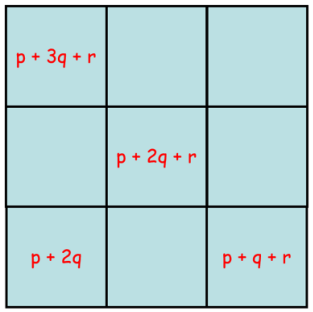
KS3 Home Learning Y8 Magic Squares		SUBJECT: Mathematics
Watch the video below about magic squares. https://www.youtube.com/watch?v=gGvyeuDT2Do  This magic square appears on the wall and the door of Gaudi's Sagrada Familia Cathedral in Barcelona What is the magic number? How many combinations of any four numbers can you find that add up to the magic number? Use **worksheet one** to record your answers	Make a Magic Square Click on the link below to find an interactive game, where you can make your own magic square. Take a screen shot of your answers to show your teacher. https://www.transum.org/software/SW/magic_square/magic_square.asp?Level=1 Can you get all the way to Level 7?	Complete a Magic Square Open **Worksheet 2 – Completing a magic square.** and complete as many of the magic squares as you can. Can you complete the 7 by 7 magic square?
Magic Squares – Substitution In these squares, you need to substitute values for each letter and work out the magic number Follow the instructions on either: **Worksheet 3a** Substitution with whole numbers **Worksheet 3b** Substitution with decimal numbers	An algebraic Magic Square **Fill in the gaps on your grids. Make it magic…**  Cut out the nine cards on **worksheet 4** and rearrange them to make a magic square so that all rows, columns and diagonals simplify to the same expression	Magic Squares of Squares Follow the instructions on **Worksheet 5**. You will need to substitute and evaluate a negative number – be careful and use your calculator. There are a couple of answers already provided – make sure you know how to get those answers before you try the rest. What do you notice?